Bruhat Bangalore Mahanagara Palike

Executive Engineer
Yelhanka Division

DETAILED ESTIMATE

NAME OF WORK : Costruction of CC road at Kondappa layout Western and Eastern side main and cros roads in ward no-02 of Yelhanka subdivision

PROJECT COST: 99.00 Lakhs

MECADEZ
Insight Makes It Happen

Mecadez Core Technologies Private limited

Project Management and Consultancy Services

Office: #103,1st Main, 3rd Cross, Kottigepalya,
Magadi Main Road, Bangalore 560 091
Ph: - +91-9538136111 +91-7829676869
E-mail: mecadez@gmail.com

BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer-Yelhanka Division

Detailed Estimate

Name of Work:Costruction of CC road at Kondappa layout Western and Eastern side main and cros roads in ward no-02 of Yelhanka subdivision

Estimate Amount : 9900000.00

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	CIVIL WORKS								
1	Removing Slab of drain and Stacking **(Page No 25., I.No.5.32 of KPWD S.R 2015-16).**								
	COVER SLAB	Sqm							
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)	L/s	1	43	0.70		30.10		
	Deuction for Cross roads (43-38)+(86-81) = 10		-1	10	0.70		-7.00		
	Ch: (43 - 86)	L/s	1	43	0.70		30.10		
	13th A cross								
	Ch: (0 - 25)	L/s	1	25	0.70		17.50		
	Ch: (30 - 55)	R/s	1	25	0.70		17.50		
	Ch: (61 - 87)	R/s	1	26	0.70		18.20		
	15th cross								
	Ch: (0 - 56)	R/s	1	56	0.70		39.20		
	Ch: (56 - 107)	R/s	1	51	0.70		35.70		
	16th A cross								
	Ch: (0 - 25)	L/s	1	25	0.70		17.50		
	Ch: (32 - 57)	L/s	1	25	0.70		17.50		
	16th cross								
	Ch: (0 - 55)	R/s	1	55	0.70		38.50		
	Ch: (55 - 114)	R/s	1	59	0.70		41.30		
	Ch: (114 - 155)	R/s	1	41	0.70		28.70		
	17th cross from Mazjid road to end road								
	Ch: (0 - 110)	L/s	1	110	0.90		99.00		
	13th A cross from shivananda stores to end road								
	Ch: (0 - 70)	b/s	2	70	0.70		98.00		
	Cross road from 13th A cross to end road								
	Ch: (10 - 60)	L/s	1	50	0.70		35.00		
	27th cross from Mazjid road to end road								
	Ch: (0 - 80)	b/s	2	80	0.70		112.00		
	Ch: (89 - 204)	b/s	2	115	0.70		161.00		
	30th cross from end road to Railway st								
	Ch: (0 - 35)	L/s	1	35	0.70		24.50		
	Ch: (43 - 123)	L/s	1	80	0.70		56.00		
	Ch: (4 - 35)	R/s	1	31	0.70		21.70		
	Ch: (43 - 123)	R/s	1	80	0.70		56.00		
	Ch: (0 - 23)	L/s	1	23	0.70		16.10		
	29th cross from railway st to end road								
	Ch: (0 - 99)	L/s	1	99	0.60		59.40		
	Ch: (109 - 133)	L/s	1	24	0.70		16.80		
	Ch: (15 - 99)	R/s	1	84	0.60		50.40		
	Ch: (109 - 133)	R/s	1	24	0.70		16.80		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	28th cross								
	Ch: (0 - 12)	L/s	1	12	0.70		8.40		
	Ch: (18 - 44)	L/s	1	26	0.70		18.20		
	Ch: (51 - 77)	L/s	1	26	0.70		18.20		
	Ch: (84 - 114)	L/s	1	30	0.70		21.00		
	Ch: (124 - 172)	L/s	1	48	0.60		28.80		
	Ch: (0 - 12)	R/s	1	12	0.70		8.40		
	Ch: (18 - 44)	R/s	1	26	0.70		18.20		
	Ch: (51 - 77)	R/s	1	26	0.70		18.20		
	Ch: (84 - 114)	R/s	1	30	0.70		21.00		
	Ch: (124 - 172)	R/s	1	48	0.60		28.80		
							1336.70	**63.72**	**85174.52**
2	Refixing Slabs of drains and Pointing in C.M(1:3) **(Page No 25., I.No.5.33 of KPWD S.R 2015-16).**								
		Sqm							
	COVER SLAB								
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)	L/s	1	43	0.70		30.10		
	Deuction for Cross roads (43-38)+(86-81) = 10		-1	10	0.70		-7.00		
	Ch: (43 - 86)	L/s	1	43	0.70		30.10		
	13th A cross								
	Ch: (0 - 25)	L/s	1	25	0.70		17.50		
	Ch: (30 - 55)	R/s	1	25	0.70		17.50		
	Ch: (61 - 87)	R/s	1	26	0.70		18.20		
	15th cross								
	Ch: (0 - 56)	R/s	1	56	0.70		39.20		
	Ch: (56 - 107)	R/s	1	51	0.70		35.70		
	16th A cross								
	Ch: (0 - 25)	L/s	1	25	0.70		17.50		
	Ch: (32 - 57)	L/s	1	25	0.70		17.50		
	16th cross								
	Ch: (0 - 55)	R/s	1	55	0.70		38.50		
	Ch: (55 - 114)	R/s	1	59	0.70		41.30		
	Ch: (114 - 155)	R/s	1	41	0.70		28.70		
	17th cross from Mazjid road to end road								
	Ch: (0 - 110)	L/s	1	110	0.90		99.00		
	13th A cross from shivananda stores to end road								
	Ch: (0 - 70)	b/s	2	70	0.70		98.00		
	Cross road from 13th A cross to end road								
	Ch: (10 - 60)	L/s	1	50	0.70		35.00		
	27th cross from Mazjid road to end road								
	Ch: (0 - 80)	b/s	2	80	0.70		112.00		
	Ch: (89 - 204)	b/s	2	115	0.70		161.00		
	30th cross from end road to Railway st								
	Ch: (0 - 35)	L/s	1	35	0.70		24.50		
	Ch: (43 - 123)	L/s	1	80	0.70		56.00		
	Ch: (4 - 35)	R/s	1	31	0.70		21.70		
	Ch: (43 - 123)	R/s	1	80	0.70		56.00		
	Ch: (0 - 23)	L/s	1	23	0.70		16.10		
	29th cross from railway st to end road								
	Ch: (0 - 99)	L/s	1	99	0.60		59.40		
	Ch: (109 - 133)	L/s	1	24	0.70		16.80		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Ch: (15 - 99)	R/s	1	84	0.60		50.40		
	Ch: (109 - 133)	R/s	1	24	0.70		16.80		
	28th cross								
	Ch: (0 - 12)	L/s	1	12	0.70		8.40		
	Ch: (18 - 44)	L/s	1	26	0.70		18.20		
	Ch: (51 - 77)	L/s	1	26	0.70		18.20		
	Ch: (84 - 114)	L/s	1	30	0.70		21.00		
	Ch: (124 - 172)	L/s	1	48	0.60		28.80		
	Ch: (0 - 12)	R/s	1	12	0.70		8.40		
	Ch: (18 - 44)	R/s	1	26	0.70		18.20		
	Ch: (51 - 77)	R/s	1	26	0.70		18.20		
	Ch: (84 - 114)	R/s	1	30	0.70		21.00		
	Ch: (124 - 172)	R/s	1	48	0.60		28.80		
							1336.70		
	Deduction for damaged						-467.85		
							868.86	**78.84**	**68500.53**
3	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate								
		Sqm							
	For Damaged portion						467.85		
							467.85	**1834.00**	**858027.73**
4	KSRRB 300-1. **Earthwork excavation by manual means** in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **(Page No141., I.No.19.1 of KPWD S.R 2015-16).**								
		Cum							
	Desilting								
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)	L/s	1	43	0.40	0.600	10.32		
	Deuction for Cross roads (43-38)+(86-81) = 10		-1	10	0.40	0.600	-2.40		
	Ch: (43 - 86)	L/s	1	43	0.40	0.600	10.32		
	13th A cross								
	Ch: (0 - 25)	L/s	1	25	0.40	0.600	6.00		
	Ch: (30 - 55)	R/s	1	25	0.40	0.600	6.00		
	Ch: (61 - 87)	R/s	1	26	0.40	0.600	6.24		
	15th cross								
	Ch: (0 - 56)	R/s	1	56	0.40	0.600	13.44		
	Ch: (56 - 107)	R/s	1	51	0.40	0.600	12.24		
	16th A cross								
	Ch: (0 - 25)	L/s	1	25	0.40	0.600	6.00		
	Ch: (32 - 57)	L/s	1	25	0.40	0.600	6.00		
	16th cross								
	Ch: (0 - 55)	R/s	1	55	0.40	0.600	13.20		
	Ch: (55 - 114)	R/s	1	59	0.40	0.600	14.16		
	Ch: (114 - 155)	R/s	1	41	0.40	0.600	9.84		
							111.36	**168.76**	**18793.11**

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	ROAD WORKS								
5	KSRRB M300-14. **Excavation for roadwork** in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 **(Page No 142., I.No.19.14 of KPWD S.R 2015-16).**								
		Cum							
	Road Cutting/New Construction								
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)		1	43	1.00	0.400	17.20		
	Ch: (43 - 86)		1	43	1.00	0.400	17.20		
	Ch: (86 - 107)		1	21	1.00	0.400	8.40		
	15th cross								
	Ch: (0 - 56)		1	56	5.00	0.400	112.00		
	16th cross								
	Ch: (55 - 114)		1	59	2.50	0.400	59.00		
	Ch: (114 - 155)		1	41	2.50	0.400	41.00		
	27th cross from Mazjid road to end road								
	Ch: (0 - 204)		1	204	1.00	0.400	81.60		
							336.40	**134.20**	**45144.88**
6	KSRRB 300-58. **Compaction of original ground** with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 **(Page No 148., I.No.19.64 of KPWD S.R 2015-16).**								
		Cum							
	Road Cutting/New Construction								
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)		1	43	1.00		43.00		
	Ch: (43 - 86)		1	43	1.00		43.00		
	Ch: (86 - 107)		1	21	1.00		21.00		
	15th cross								
	Ch: (0 - 56)		1	56	5.00		280.00		
	16th cross								
	Ch: (55 - 114)		1	59	2.50		147.50		
	Ch: (114 - 155)		1	41	2.50		102.50		
	27th cross from Mazjid road to end road								
	Ch: (0 - 204)		1	204	1.00		204.00		
							841.00	**4.86**	**4087.26**
7	KSRRB M400-6.1. Construction of **granular sub-base** by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material **(Page No 154., I.No.20.4.2 of KPWD S.R 2015-16).**								
		Cum							
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)		1	43	1.00	0.200	8.60		
	Ch: (43 - 86)		1	43	1.00	0.200	8.60		
	Ch: (86 - 107)		1	21	1.00	0.200	4.20		
	15th cross								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Ch: (0 - 56)		1	56	5.00	0.150	42.00		
	16th cross								
	Ch: (55 - 114)		1	59	2.50	0.200	29.50		
	Ch: (114 - 155)		1	41	2.50	0.200	20.50		
	27th cross from Mazjid road to end road								
	Ch: (0 - 204)		1	204	1.00	0.200	40.80		
							154.20	**1622.16**	**250137.07**
8	KSRRB M600-1. Construction of **dry lean cement concrete mix M5** with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383,) aggregate cement ratio not to exceed 15:1,aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601 **(Page No,-173, I.No.22.1 of KPWD S.R 2015-16)**								
		Cum							
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)		1	43	1.00	0.100	4.30		
	Ch: (43 - 86)		1	43	1.00	0.100	4.30		
	Ch: (86 - 107)		1	21	1.00	0.100	2.10		
	15th cross								
	Ch: (0 - 56)		1	56	5.00	0.100	28.00		
	16th cross								
	Ch: (55 - 114)		1	59	2.50	0.100	14.75		
	Ch: (114 - 155)		1	41	2.50	0.100	10.25		
	Cross road from 13th A cross to end road								
	Ch: (0 - 60)		1	5	2.00	0.100	1.00		
	27th cross from Mazjid road to end road								
	Ch: (0 - 204)		1	204	1.00	0.100	20.40		
			1	3	2.00	0.100	0.60		
	30th cross from end road to Railway st								
	Ch: (0 - 23)		1	3	2.00	0.100	0.60		
	29th cross from railway st to end road								
	Ch: (0 - 147)								
			1	2.5	2.00	0.100	0.50		
			1	2	1.00	0.100	0.20		
			1	1	1.50	0.100	0.15		
	28th cross								
	Ch: (0 - 172)								
			1	7.4	0.30	0.100	0.22		
			1	7	0.80	0.100	0.56		
			1	2	0.80	0.100	0.16		
			1	2	0.80	0.100	0.16		
							88.25	**3900.96**	**344267.52**

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
9	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 **design mix M30**(at 360 kg per cum coarse aggregate @ 0.69 cum and fine aggregate @0.46 cum) , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 eaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing) Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications **(Page No 174., I.No.22.6.1 of KPWD S.R 2015-16).**								
		Cum							
	Kondappa layout								
	14th cross								
	Ch: (0 - 43)		1	43	5.00	0.150	32.25		
	Ch: (43 - 86)		1	43	5.40	0.150	34.83		
	Ch: (86 - 155)		1	69	3.50	0.150	36.23		
	13th A cross								
	Ch: (0 - 25)		1	25	5.00	0.150	18.75		
	Ch: (30 - 55)		1	25	4.50	0.150	16.88		
	Ch: (61 - 87)		1	26	2.10	0.150	8.19		
	15th cross								
	Ch: (0 - 56)		1	56	5.00	0.150	42.00		
	Ch: (56 - 107)		1	51	5.00	0.150	38.25		
	16th A cross								
	Ch: (0 - 25)		1	25	5.00	0.150	18.75		
	Ch: (32 - 57)		1	25	4.80	0.150	18.00		
	16th cross								
	Ch: (0 - 55)		1	55	4.50	0.150	37.13		
	Ch: (55 - 114)		1	59	5.50	0.150	48.68		
	Ch: (114 - 155)		1	41	5.50	0.150	33.83		
	17th cross from Mazjid road to end road								
	Ch: (0 - 110)		1	110	4.20	0.150	69.30		
	Cross road-1								
	Ch: (0 - 65)		1	65	4.00	0.150	39.00		
	13th cross opp to shivananda stores								
	Ch: (0 - 12.5)		1	12.5	6.50	0.150	12.19		
	13th A cross from shivananda stores to end road								
	Ch: (0 - 70)		1	70	4.50	0.150	47.25		
	Cross road from 13th A cross to end road								
	Ch: (0 - 60)		1	60	2.50	0.150	22.50		
	27th cross from Mazjid road to end road								
	Ch: (0 - 80)		1	80	4.50	0.150	54.00		
	Ch: (80 - 204)		1	124	4.00	0.150	74.40		
	30th cross from end road to Railway st								
	Ch: (0 - 123)		1	123	5.80	0.150	107.01		
	Ch: (0 - 23)		1	23	3.50	0.150	12.08		
	29th cross from railway st to end road								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Ch: (0 - 147)		1	147	6.00	0.175	154.35		
	28th cross								
	Ch: (0 - 172)		1	172	7.50	0.175	225.75		
							1201.57	**5957.28**	**7158074.04**
2	**Providing groove cutting** for Concrete pavement width of 5mm to 10mm and depth 80mm- 100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade,coolant etc., including cleaning of groove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications.**(Page No 172., I.No.22.8 of KPWD S.R 2014-15).**								
		Rmt							
	LONGITUDINAL								
	14th cross								
	Ch: (0 - 43)		1	43			43.00		
	Ch: (43 - 86)		1	43			43.00		
	Ch: (86 - 155)		1	69			69.00		
	13th A cross								
	Ch: (0 - 25)		1	25			25.00		
	Ch: (30 - 55)		1	25			25.00		
	Ch: (61 - 87)		1	26			26.00		
	15th cross								
	Ch: (0 - 56)		1	56			56.00		
	Ch: (56 - 107)		1	51			51.00		
	16th A cross								
	Ch: (0 - 25)		1	25			25.00		
	Ch: (32 - 57)		1	25			25.00		
	16th cross								
	Ch: (0 - 55)		1	55			55.00		
	Ch: (55 - 114)		1	59			59.00		
	Ch: (114 - 155)		1	41			41.00		
	17th cross from Mazjid road to end road								
	Ch: (0 - 110)		1	110			110.00		
	Cross road-1								
	Ch: (0 - 65)		1	65			65.00		
	13th cross opp to shivananda stores								
	Ch: (0 - 12.5)		1	12.5			12.50		
	13th A cross from shivananda stores to end road								
	Ch: (0 - 70)		1	70			70.00		
	Cross road from 13th A cross to end road								
	Ch: (0 - 60)		1	60			60.00		
	27th cross from Mazjid road to end road								
	Ch: (0 - 80)		1	80			80.00		
	Ch: (80 - 204)		1	124			124.00		
	30th cross from end road to Railway st								
	Ch: (0 - 123)		1	123			123.00		
	Ch: (0 - 23)		1	23			23.00		
	29th cross from railway st to end road								
	Ch: (0 - 147)		1	147			147.00		
	28th cross								
	Ch: (0 - 172)		1	172			172.00		
	LATERAL								
	Cross road-2								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	14th cross								
	Ch: (0 - 43)		12	5.00			60.00		
	Ch: (43 - 86)		12	5.40			64.80		
	Ch: (86 - 155)		20	3.50			70.00		
	13th A cross								
	Ch: (0 - 25)		7	5.00			35.00		
	Ch: (30 - 55)		7	4.50			31.50		
	Ch: (61 - 87)		7	2.10			14.70		
	15th cross								
	Ch: (0 - 56)		16	5.00			80.00		
	Ch: (56 - 107)		15	5.00			75.00		
	16th A cross								
	Ch: (0 - 25)		7	5.00			35.00		
	Ch: (32 - 57)		7	4.80			33.60		
	16th cross								
	Ch: (0 - 55)		16	4.50			72.00		
	Ch: (55 - 114)		17	5.50			93.50		
	Ch: (114 - 155)		12	5.50			66.00		
	17th cross from Mazjid road to end road								
	Ch: (0 - 110)		31	4.20			130.20		
	Cross road-1								
	Ch: (0 - 65)		19	4.00			76.00		
	13th cross opp to shivananda stores								
	Ch: (0 - 12.5)		4	6.50			26.00		
	13th A cross from shivananda stores to end road								
	Ch: (0 - 70)		20	4.50			90.00		
	Cross road from 13th A cross to end road								
	Ch: (0 - 60)		17	2.50			42.50		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	27th cross from Mazjid road to end road								
	Ch: (0 - 80)		23	4.50			103.50		
	Ch: (80 - 204)		35	4.00			140.00		
	30th cross from end road to Railway st								
	Ch: (0 - 123)		35	5.80			203.00		
	Ch: (0 - 23)		7	3.50			24.50		
	29th cross from railway st to end road								
	Ch: (0 - 147)		42	6.00			252.00		
	28th cross								
	Ch: (0 - 172)		49	7.50			367.50		
							3715.80	**124.20**	**461502.36**
	Sub Total								**9293709.03**
23	Cost towards Design Report and Detailed Estimate,PMC/Third party								**139405.64**
24	Cost towards DLP								**464685.45**
25	Miscllenous and other charges								**2199.89**
	Grand Total								**9900000.00**

Certificate:-

1. That the workspot inspected by me and found work is necessary
2. That the area comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2015-16
4. That the provisions made in the estimate are necessary and quite essential.

Consultant:

For M/s MECADEZ CORE TECHNOLOGIES PVT LTD

Asst. Engineer
Ward No-02
BBMP

AEE
Yelhanka Sub Division
BBMP

Executive Engineer
Yelhanka Division
BBMP